

I claim:

1. A power-switching mechanism for an electronic device comprising:  
a control input connectable to a conductor of a connection between the electronic device and a host device; and,  
5 a switching device capable of coupling a power source to a power supply, the switching device controlled by the control input such that the switching device connects the power source to the power supply when a voltage is present on the conductor and the switching device disconnects the power supply from the power source when the voltage is absent on the conductor.
- 10 2. The power-switching mechanism of claim 1, wherein the electronic device consumes no power when the voltage is absent on the conductor and the switching device correspondingly disconnects the power supply of the electronic device from the power source.
- 15 3. The power-switching mechanism of claim 1, wherein the conductor has the voltage present when the host device is in a turned-on and fully operational state.
- 20 4. The power-switching mechanism of claim 1, further comprising a switch coupled between the control input and the switching device, such that when the switch is on, the control input is able to control the switching device via the voltage present on the conductor, and when the switch is off, the switching device disconnects the power supply from the power source and the control input is unable to control the switching device, regardless of the voltage present on the conductor.
- 25 5. The power-switching mechanism of claim 4, wherein the switch is turned on and off by user control, such that the user is able to override control of the

switching device by the control input via the voltage present on the conductor for disconnecting the power supply from the power source.

6. The power-switching mechanism of claim 4, wherein the switch is turned on and off by user control, such that the user is able to control whether the  
5 electronic device is on when the host device is on but is unable to control whether the electronic device is on when the host device is off, the electronic device remaining off when the host device is off regardless of user control of the switch.
7. The power-switching mechanism of claim 1, wherein the connection between  
10 the electronic device and the host device is a cable including the conductor, a ground conductor, and at least one signal conductor over which the electronic device and the host device communicate.
8. The power-switching mechanism of claim 1, wherein the electronic device is an image-forming device, such that the image-forming device is to receive an  
15 image to be formed on media from the host device over the connection.
9. The power-switching mechanism of claim 1, wherein the switching device is a relay.
10. The power-switching mechanism of claim 1, wherein the conductor is a power conductor.
- 20 11. A power-switching mechanism for an electronic device comprising:  
a control input line connectable to a power conductor of a connection between the electronic device and a host device over which the electronic device and the host device communicate, the power conductor having a voltage present when the host device is in a state other than one of: a sleep state, a  
25 hibernation state, and a turned-off state; and,

a relay capable of coupling a power source to a power supply of the electronic device, the relay controlled by the control input line such that the relay connects the power source to the power supply when the voltage is present on the power conductor and the relay disconnects the power supply from the power source when the voltage is absent on the power conductor.

12. The power-switching mechanism of claim 11, wherein the electronic device consumes no power when the voltage is absent on the power conductor and the relay correspondingly disconnects the power supply of the electronic device from the power source.

10 13. The power-switching mechanism of claim 11, wherein the power conductor has the voltage present when the host device is in a turned-on and fully operational state.

15 14. The power-switching mechanism of claim 11, further comprising a switch coupled between the control input line and the relay, such that when the switch is on, the control input line is able to control the relay via the voltage present on the power conductor, and when the switch is off, the relay disconnects the power supply from the power source and the control input line is unable to control the relay, regardless of the voltage present on the power conductor.

20 15. The power-switching mechanism of claim 14, wherein the switch is turned on and off by user control, such that the user is able to override control of the relay by the control input line via the voltage present on the power conductor for disconnecting the power supply from the power source.

25 16. The power-switching mechanism of claim 14, wherein the switch is turned on and off by user control, such that the user is able to control whether the electronic device is on when the host device is on but is unable to control whether the electronic device is on when the host device is off, the electronic

device remaining off when the host device is off regardless of user control of the switch.

17. The power-switching mechanism of claim 11, wherein the connection between the electronic device and the host device is a cable including the  
5 power conductor, a ground conductor, and at least one signal conductor over which the electronic device and the host device communicate.

18. The power-switching mechanism of claim 11, wherein the electronic device is an image-forming device, such that the image-forming device is to receive an image to be formed on media from the host device over the connection.

10 19. A power-switching mechanism for an electronic device comprising:  
a switching device capable of coupling a power source to a power supply of the electronic device; and,  
means for controlling the switching device based in correspondence with a voltage present on a power conductor of a connection between the electronic  
15 device and a host device over which the electronic device and the host device communicate, the power conductor having the voltage present when the host device is in a state other than one of: a sleep state, a hibernation state, and a turned-off state.

20 20. The power-switching mechanism of claim 19, wherein the switching device is a relay.

21. The power-switching mechanism of claim 19, wherein the electronic device consumes no power when the voltage is absent on the power conductor and the relay correspondingly disconnects the power supply of the electronic device from the power source.

22. The power-switching mechanism of claim 19, wherein the power conductor has the voltage present when the host device is in a turned-on and fully operational state.

23. The power-switching mechanism of claim 19, further comprising means for  
5 manually overriding coupling of the power source to the power supply when the voltage is present on the power conductor.

24. The power-switching mechanism of claim 23, wherein, via the means for manually overriding coupling of the power source to the power supply, a user is able to control whether the electronic device is on when the host device is on  
10 but is unable to control whether the electronic device is on when the host device is off, the electronic device remaining off when the host device is off.

25. The power-switching mechanism of claim 19, wherein the connection between the electronic device and the host device is a cable including the power conductor, a ground conductor, and at least one signal conductor over  
15 which the electronic device and the host device communicate.

26. The power-switching mechanism of claim 19, wherein the electronic device is an image-forming device, such that the image-forming device is to receive an image to be formed on media from the host device over the connection.

27. An electronic device:

20 a power supply to receive power from a power source for operating the electronic device;

a connector capable of connecting the electronic device to a host device and over which the electronic device and the host device communicate;

a power conductor within the connector having a voltage present when the  
25 host device is in a state other than one of: a sleep state, a hibernation state, and a turned-off state; and,

a relay to control connection of the power supply to the power source, the relay controlled by the power conductor, such that the relay connects the power source to the power supply when the voltage is present on the power conductor and the relay disconnects the power supply from the power source when the voltage is absent on the power conductor.

28. The electronic device of claim 27, wherein the electronic device consumes no power when the voltage is absent on the power conductor.

29. The electronic device of claim 27, wherein the power conductor has the voltage present when the host device is in a turned-on and fully operational state.

30. The electronic device of claim 27, further comprising a switch coupled between power conductor and the relay, such that when the switch is on, the voltage present on the power conductor is able to control the relay, and when the switch is off, the relay disconnects the power supply from the power source and the power conductor no longer controls the relay, regardless of the voltage present thereon.

31. The electronic device of claim 30, wherein the switch is turned on and off by user control, such that the user is able to control whether the electronic device is on when the host device is on but is unable to control whether the electronic device is on when the host device is off.

32. The electronic device of claim 27, further comprising a ground conductor and at least one signal conductor within the connector.

33. The electronic device of claim 27, further comprising an image-forming mechanism to receive power from the power supply and to form images on media, such that the electronic device is an image-forming device that is to

receive an image to be formed on the media from the host device through the connector.

34. An electronic device comprising:

a power supply to receive power from a power source for operating the

5 electronic device;

a connector capable of connecting the electronic device to a host device and over which the electronic device and the host device communicate;

a power conductor within the connector having a voltage present when the host device is in a state other than one of: a sleep state, a hibernation state, and

10 a turned-off state; and,

means for controlling connection of the power supply to the power source based on whether a voltage is present on the power conductor.

35. The electronic device of claim 34, wherein the electronic device consumes no power when the voltage is absent on the power conductor.

15 36. The electronic device of claim 34, wherein the power conductor has the voltage present when the host device is in a turned-on and fully operational state.

37. The electronic device of claim 34, further comprising means for manually overriding coupling of the power source to the power supply when the voltage is  
20 present on the power conductor.

38. The electronic device of claim 37, wherein, via the means for manually overriding coupling of the power source to the power supply, a user is able to control when the electronic device is on when the host device is on but is unable to control whether the electronic device is on when the host device is off.

39. The electronic device of claim 34, further comprising a ground conductor and at least one signal conductor within the connector.

40. The electronic device of claim 34, further comprising an image-forming mechanism to receive power from the power supply and to form images on media, such that the electronic device is an image-forming device that is to receive an image to be formed on the media from the host device through the connector.

41. A system comprising:

10 a connection between a host device and a peripheral device over which the host device and the peripheral device communicate, and having at least a conductor;

the host device to provide a voltage on the conductor when the host device is in a state other than one of: a sleep state, a hibernation state, and a turned-off state; and,

15 the peripheral device having a power supply connectable to a power source, the power supply connected to the power source when the voltage is present on the conductor.

42. The system of claim 41, wherein the electronic device consumes no power when the voltage is absent on the conductor.

20 43. The system of claim 41, wherein the host device provides the voltage on the conductor when the host device is in a turned-on and fully operational state.

44. The system of claim 41, wherein the connection further includes a ground conductor, and at least one signal conductor over which the electronic device and the host device communicate.

45. The system of claim 41, wherein the electronic device is an image-forming device, such that the image-forming device is to receive an image to be formed on media from the host device over the connection.

46. A method comprising:

5        in response to a host device entering one of a sleep state, a hibernation state, and a turned-off state,

         the host device no longer providing a voltage on a power conductor of a connection between the host device and an electronic device over which the host device and the electronic device communicate;

10        in response to the host device no longer providing the voltage on the power conductor, disconnecting a power supply of the electronic device from a power source, such that the electronic device consumes no power.

47. The method of claim 46, further comprising the host device initially entering one of the sleep state, the hibernation state, and the turned off state.

15        48. The method of claim 46, wherein disconnecting the power supply of the electronic device from the power source comprises the voltage on the power conductor controlling a relay coupling the power supply to the power source, such that the voltage being absent on the power conductor turns off the relay.

20        49. The method of claim 46, further comprising, in response to the host device entering a turned-on and fully operational state:

         the host device providing the voltage on the power conductor of the connection;

         in response to the host device providing the voltage on the power conductor, connecting the power supply of the electronic device to the power source, such  
25        that the electronic device is on and operational.

50. The method of claim 49, further comprising the host device initially entering the turned-on and fully operational state.

51. The method of claim 49, wherein connecting the power supply of the electronic device to the power source comprises the voltage on the power  
5 conductor controlling a relay coupling the power supply to the power source, such that the voltage being present on the power conductor turns on the relay.